VIEWPOINT

Unrest in BaltimoreThe Role of Public Health

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There are many ways to understand what is happening in Baltimore and, to varying degrees, across the United States. The problems reflect a long-standing dysfunctional relationship between law enforcement and citizens, structural poverty, and the legacy of discrimination in housing and finance policy. The problems also deeply engage public health—in addressing immediate needs, in understanding the basis of unrest, and in shaping long-term solutions.

In Baltimore, during the riots and subsequent demonstrations, the Health Department coordinated the readiness and security of area hospitals and health care facilities. The Health Department provided situational updates for hospital emergency planners and led the development of a citywide security plan for hospitals. In the aftermath of the violence, the Health Department established a hotline for citizens whose access to medications was disrupted by the destruction and closing of more than a dozen city pharmacies. To reach those most in need, the Health Department led door-to-door outreach in public housing for seniors in affected areas and facilitated transfers of prescriptions to other pharmacies and delivery of medications.

An immediate challenge was addressing the mental health needs of city residents. The Health Department arranged for trauma counseling across the city, including providing a free 24/7 mental health crisis line, organizing mental health professionals at each of the 189 public schools, and working with other city and private partners to provide group counseling and healing circles at churches and community meetings. The Health Department likely played a key role in dispelling rumors. For example, after news accounts reported that city hospitals and clinics were no longer in operation, the Health Department provided an online resource updated multiple times a day with changes in hospital and clinic hours.

Even as the situation unfolded, public health provided a critical window into understanding the underlying causes of unrest in Baltimore. In 2008 and 2011, the Baltimore City Health Department, in coordination with students and faculty at the Johns Hopkins Bloomberg School of Public Health, developed compre-

hensive health profiles for each of 55 neighborhoods across the city.² These reports identified a disparity in life expectancy exceeding 20 years between communities separated by a few miles. The reports also provided data on many social factors, including employment, school readiness, the food environment, the arrest rate, vacant housing, and lead poisoning. During the unrest, the report for Sandtown-Winchester, the community where Freddie Gray lived, became the basis for numerous media reports (Table).

Less noticed was the progress made by public health efforts to address some of the sources of inequality and poor health in the city. It has been widely reported that in the early 1990s, Freddie Gray experienced severe lead poisoning, a condition known to be associated with behavioral problems and school failure. Following major campaigns to regulate housing rentals and prosecute landlords, the number of children experiencing lead levels greater than 10 µg/dL in Baltimore decreased more than 98%, from 11 316 cases in 1992³ to 218 in 2013.⁴ During the last decade, the Health Department implemented antiviolence programs including the Cure Violence model, which was found to reduce shootings and the propensity toward violence.5 These efforts contributed to a substantial reduction in homicides. According to the US Federal Bureau of Investigation, homicides in the city have declined by about a third, from an average of 323.6 from 1990 through 1994 (the first 5 years of Freddie Gray's life) to 222 from 2008 to 2012.6 Over the same period, expansions in access to treatment for opioid use disorders contributed to major reductions in death by heroin overdose from a high of more than 300 to a low of 76 in 2011 (although recent increases have resulted from a surge of inexpensive and tainted heroin on the East Coast).7 Focused attention to African American infant mortality and teen pregnancy rates have led to substantial declines in both.8 Greater Medicaid and private insurance coverage under the Affordable Care Act is helping tens of thousands of city residents access needed care, addressing at least in part some of the medical reasons behind educational struggles and unemployment.

As recent events have made plain, however, this progress is not nearly enough. It is time to broaden efforts to bring public health approaches to multiple sectors. Public health can work more closely with schools to keep children healthy and learning, more effectively with housing agencies to direct strategy based on mapping of preventable illness, and more comprehensively with vulnerable teen parents before and after childbirth. Efforts that provide treatment and support for mental illness and substance use dis-

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Table. Selected Metrics Comparing Sandtown-Winchester and Harlem Park With Baltimore City, From Baltimore City Health Department's Neighborhood Health Profile

Measure	Sandtown-Winchester and Harlem Park	Baltimore City
Unemployment, 2005-2009, %	21.0	11.1
Families in poverty, 2005-2009, %	30.9	15.2
Percentage of residents aged ≥25 y with high school degree or less, 2005-2009	75.5	52.6
No. of alcohol stores per 10 000 residents, 2009	8.1	4.6
No. of tobacco stores per 10 000 residents, 2009	56.1	21.8
Juvenile arrest rate per 1000 10- to 17-years-olds, 2005-2009	252.3	145.1
Lead paint violations per 10 000 households, 2000-2008, No./y	39.8	11.8
Vacant buildings per 10 000 housing units, 2009	2411.5	567.2
Life expectancy at birth, y ^a	65.3	71.8
Percentage of deaths avoidable if community achieved mortality rate of the 5 highest-income communities in Baltimore ^a	50.8	36.1

a 2010 Census and 2005-2009 vital statistics data.

orders at the moment of greatest need should be a top priority. In addition, public health researchers should further develop and scale initiatives to prevent youth violence and provide insight into the relationship between law enforcement and communities they serve. This is not a moment for public health to question its effectiveness, but rather to strengthen its resolve.

An important part of a public health approach is to resist ideology and dogma. Public health officials, while engaging with leaders in other fields, can ask difficult questions about whether certain types of social policies are working based on evidence and, if not, what alternative approaches can be tried. In developing and advocating for innovative solutions, public health outreach can engage communities in the search for answers.

Even while working with criminal justice, education, housing, and other fields, public health must engage the health care system. About 1 of every 5 dollars in the US economy is in health care, and health care institutions are anchors of local communities. Medical professionals and institutions have tremendous opportunities to support economic investment and employment

in distraught areas. They also can help individuals and families leverage opportunities for assistance, education, and training. These efforts can be supported by emerging incentives that reward better community health.⁹

In all these efforts, educational institutions have a vital role to play. In Baltimore, hundreds of students, staff, and faculty at the Johns Hopkins Bloomberg School of Public Health have been involved in recent events by staffing city hotlines and assisting with door-to-door outreach, joining clean-up activities, developing and promoting public education on trauma, and engaging in conversations on ways to improve the school's engagement with the underlying causes of social unrest in the city. Aligning the intellectual, human, and economic resources of academic centers with the challenges of the day must be an important priority.

This difficult time for Baltimore is not necessarily a harbinger of what is to come. It is a moment for reflection and, we hope, an inflection point. The events of the last weeks are a call for public health to embrace the mission of pursuing solutions to longstanding health inequities in every corner of US society.

ARTICLE INFORMATION

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